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In the Claims:

Listing of all claims:

1                   1.     (Currently Amended)       An apparatus for  
2     detecting a seal seals formed between successive bags on a  
3     moving film moving in a machine direction, comprising;  
4                   a force transmitter, disposed to transmit a force  
5     from the film, wherein the force is created when the film  
6     moves in the machine direction with respect to the force  
7     transmitter;  
8                   a force sensor disposed to receive the transmitted  
9     force and provide a force signal in response thereto; and  
10                  a controller, disposed to receive the force signal  
11     and provide a seal signal indicative of the presence and  
12     location of the seal in response thereto.

1                   2.     (Original)       The apparatus of claim 1, wherein  
2     the force sensor is an acoustic sensor.

1                   3.     (Original)       The apparatus of claim 1, wherein  
2     the force sensor is a mechanical sensor.

1                   4.     (Original)       The apparatus of claim 1, wherein  
2     the force sensor is a vibration sensor.

1                   5.     (Original)       The apparatus of claim 1, further  
2     comprising an anvil disposed on a first side of a film path,  
3     wherein the force transmitter is disposed on a second side of the  
4     film path.

1                   6.     (Original)       The apparatus of claim 1, wherein  
2     the force sensor is a piezoelectric sensor.

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1                   7.     (Original)       The apparatus of claim 5, wherein  
2     the force transmitter is a quill disposed near a path of the  
3     film.

1                   8.     (Original)       The apparatus of claim 6, wherein  
2     the quill is rigid.

1                   9.     (Original)       The apparatus of claim 7, wherein  
2     the quill is comprised of stainless steel.

1                   10.    (Original)       The apparatus of claim 6, wherein  
2     the quill is angled in a downstream film path direction, relative  
3     to normal to the film path.

1                   11.    (Original)       The apparatus of claim 10, wherein  
2     the quill includes a radius surface abutting the film path, and  
3     the quill is held against the film path by a spring force.

1                   12.    (Original)       The apparatus of claim 5, wherein  
2     the controller includes an amplitude comparator that receives the  
3     force signal and an amplitude threshold.

1                   13.    (Original)       The apparatus of claim 5, wherein  
2     the controller includes a rise-time comparator that receives the  
3     force signal and a rise-time threshold.

1                   14.    (Original)       The apparatus of claim 1, wherein the  
2     controller includes a window circuit.

1                   15.    (Currently Amended)     A method for detecting a  
2     seal formed between successive bags on a moving film moving  
3     in a machine direction, comprising;

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4                   creating a force when the film moves in the  
5                   machine direction relative to a sensor;  
6                   providing a force signal responsive to the seal;  
7                   and  
8                   detecting the force and providing a seal signal  
9                   indicative of the presence and location of the seal in  
10                  response thereto.

1                   16. (Original)           The method of claim 15, further  
2                   comprising transmitting a force from the film.

1                   17. (Original)           The method of claim 15, wherein  
2                   providing the force signal includes detecting an acoustic signal.

1                   18. (Original)           The method of claim 16, wherein  
2                   providing the force signal includes detecting a mechanical  
3                   signal.

1                   19. (Original)           The method of claim 16, wherein  
2                   providing a force signal includes sensing a vibration.

1                   20. (Original)           The method of claim 15, further  
2                   comprising transmitting the force with a quill disposed near a  
3                   path of the film.

1                   21. (Original)           The method of claim 15, wherein  
2                   providing a seal signal includes comparing an amplitude of the  
3                   force with a threshold.

1                   22. (Original)           The method of claim 21, wherein  
2                   providing a seal signal includes making the comparison during a  
3                   window.

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1                   23. (Original)           The method of claim 22, wherein  
2 providing a seal signal includes comparing a rise-time of the  
3 force with a threshold.

1                   24. (Currently Amended)           An apparatus for  
2 detecting a seal formed between successive bags on a moving  
3 film moving in a machine direction, comprising;  
4                   means for providing a force signal in response to  
5 the seal and a force, wherein the force is created when the  
6 film moves in the machine direction;  
7                   means for detecting the force signal, coupled to  
8 the means for providing a force signal; and  
9                   means for providing a seal signal indicative of  
10 the presence and location of the seal in response to the  
11 force signal, coupled to the means for detecting.

1                   25. (Original)           The apparatus of claim 24, further  
2 comprising means for transmitting a force from the film to the  
3 means for detecting, coupled to the means for detecting.

1                   26. (Original)           The apparatus of claim 25, wherein  
2 the means for detecting includes means for detecting an acoustic  
3 signal.

1                   27. (Original)           The apparatus of claim 25, wherein  
2 the means for detecting includes means for detecting a mechanical  
3 signal.

1                   28. (Original)           The apparatus of claim 25, wherein  
2 the means for detecting includes means for detecting a vibration  
3 signal.

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1                   29. (Original)           The apparatus of claim 25, wherein  
2   the means for providing a seal signal includes means for  
3   comparing an amplitude of the force with a threshold.

1                   30. (Original)           The apparatus of claim 29, wherein  
2   the means for providing a seal signal includes means for making  
3   the comparison during a window.

1                   31. (Original)           The apparatus of claim 30, wherein  
2   the means for providing a seal signal includes means for  
3   comparing a rise-time of the force with a threshold.

1                   32. (Currently Amended)           A machine, comprising;  
2                   a force transmitter, disposed to transmit a force  
3   responsive to a seal formed between successive bags on a  
4   continuous film moving in a machine direction on a bag,  
5   wherein the force is created as the bag moves in the machine  
6   direction relative to the transmitter;  
7                   a force sensor disposed to receive the transmitted  
8   force and provide a force signal in response thereto;  
9                   at least one upstream processing device, located  
10   upstream of the force transmitter;  
11                   at least one downstream processing device, located  
12   downstream of the force transmitter; and  
13                   a controller, disposed to receive the force signal  
14   and provide a seal signal indicative of the presence and  
15   location of the seal in response thereto.

1                   33. (Original)           The apparatus of claim 32, wherein  
2   the force sensor is a mechanical sensor.

1                   34. (Original)           The apparatus of claim 32, further  
2   comprising an anvil disposed on a first side of a film path,

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3 wherein the force transmitter is disposed on a second side of the  
4 film path.

1 35. (Original) The apparatus of claim 34, wherein  
2 the force sensor is a piezoelectric sensor.

1 36. (Original) The apparatus of claim 35, wherein  
2 the force transmitter is a quill disposed near a path of the  
3 film.

1 37. (Original) The apparatus of claim 36, wherein  
2 the quill is angled downstream.

1 38. (Original) The apparatus of claim 37, wherein  
2 the quill includes a radius surface abutting the film path, and  
3 the quill is held against the film path by a spring force.

1 39. (Original) The apparatus of claim 38, wherein the  
2 controller includes a window circuit.

1 40. (Original) The apparatus of claim 32, wherein one  
2 of the at least one downstream devices is registered to the seal.

1 41. (Original) The apparatus of claim 40, wherein one  
2 of the at least one downstream devices includes a knife.

1 42. (Original) The apparatus of claim 40, wherein one  
2 of the at least one downstream devices and the force transmitter  
3 are in a common tension zone.

1 43. (Currently Amended) A method for processing  
2 a bag plurality of bags formed from successive seals on a  
3 continuous film, comprising;

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4 transporting the film from a first processing  
5 device to a seal sensing location, and past the seal sensing  
6 location in a machine direction;  
7 providing a force signal responsive to the seal  
8 and a force at the seal sensing location, wherein the force  
9 is created by the seal moving in the machine direction;  
10 detecting the force and providing a seal signal  
11 indicative of the presence and location of the film in  
12 response thereto;  
13 transporting the film to a second processing  
14 device.

1 44. (Original) The method of claim 43, further  
2 comprising transmitting a force from the film.

1 45. (Original) The method of claim 44, wherein  
2 providing the force signal includes detecting a mechanical  
3 signal.

1 46. (Original) The method of claim 43, wherein  
2 providing a seal signal includes comparing an amplitude of the  
3 force with a threshold.

1 47. (Original) The method of claim 46, wherein  
2 providing a seal signal includes making the comparison during a  
3 window.

1 48. (Original) The method of claim 43, wherein  
2 providing a seal signal includes comparing a rise-time of the  
3 force with a threshold.